

STUDENT ID NO									
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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2015/2016

BAC 3684 – SECURITY INVESTMENTS AND PORTFOLIO MANAGEMENT

(All sections / Groups)

05 OCTOBER 2015 2.30 p.m. - 5.30 p.m. (3 Hours)

INSTRUCTIONS TO STUDENTS

- 1. This Question paper consists of 5 pages with 4 Questions only.
- 2. Attempt ALL questions. All questions carry equal marks and the distribution of the marks for each question is given.
- 3. Please print all your answers in the Answer Booklet provided.

Question 1 (25 marks)

a. You are interested on buying stocks from Tek Seng Holding Berhad in Bursa Malaysia. Tek Seng is a public limited company and an investment holding company. Its subsidiaries are principally engaged in manufacturing and trading of polyvinyl chloride related products and non-woven products and properties rentals. In the meantime, it has a track record of more than 30 years in the plastics industry. Given the following information:

Probabilities	0.20	0.15	0.50	0.15
Possible Outcomes	20%	15%	11%	-5%

Calculate the expected return and risk for stocks of Tek Seng Holding Berhad.

(14 marks)

- b. When analyzing how security returns move together, it is always essential to talk about the correlation coefficients of your investments portfolios. If you are asked to discuss about the portfolios correlation coefficients, what do you generally expect from the correlations between the following assets:
 - i. Stocks and bonds?

(2 marks)

ii. Stocks and real estate?

(2 marks)

c. Individual investors must maximise their asset allocation if they need to increase their portfolios returns. Discuss the importance of the asset allocation decision for portfolio performance by providing examples.

(7 marks)

Continued...

Question 2 (25 marks)

a. Sunway Berhad is one of Malaysia's leading public listed property-construction corporations with 12 businesses across 50 locations worldwide and a 13,000 strong employee's base. Currently, it is listed on the FTSE4 Bursa Malaysia Index for its consistent demonstration of socially responsible business practices based on welldefined environmental social and governance criteria.

If you are interested to buy Sunway's stock at Bursa Malaysia, calculate the required rate of return on Sunway's stock if its current price is RM35 per share, next year's expected dividend is RM2.00 per share, its return on equity is 12 percent, and its dividend payout ratio is 55 percent.

(7 marks)

b. Spritzer is Malaysia's bestselling natural mineral water. Since the late 1980's, Spritzer consists of five subsidiaries which have been specialized in manufacturing and distribution of natural mineral water, sparkling natural mineral water and distilled drinking water. If the current market price of the stock of Spritzer is RM30 per share. The dividends for the next year are expected to be RM4.00 per share and the investor is confident that the selling price of the stock will be RM35 at the end of one year. Assuming dividends are growing at a constant rate, calculate the implied rate of return of this company.

(13 marks)

Continued ...

c. Investors determine stock prices on the basis of the expected cash flows to be received from a stock and the risk involved. Assume stock prices truly follow a random walk. Is this evidence of market irrationality? Explain.

(5 marks)

Question 3 (25 marks)

a. Assume a U.S investor bought \$350,000 of French notes in January because of their much higher yields relative to U.S notes and plans to sell them in December. Consider that the yield curve remains flat for that time period. The investors want to collect the higher yield without taking much exchange rate risk, which could reduce her overall return. The contract size is €100,000, with expirations in March, June, September, and December. At a price of \$1.2965, one contract is worth \$1.2965x100,000, or \$129,650. To protect against adverse currency movements, the investor sells two future contracts with a total value of \$162,062.50x2=\$324,125. Now assume the dollar rises against Euro so that one dollar in December will buy 0.7776 Euros instead of the previous 0.7713 (calculated as 1/1.2965). The Euro contract is now quoted at (1/0.7776= \$1.286), and each contract is worth 100,000x\$1.286=\$128,600 or total of \$257,200 for two. Calculate how much profits the investors made.

(15 marks)

- b. When would an investor likely do the following?
 - i) Buy a call on a stock index.

(2 marks)

ii) Buy a put on interest rate futures.

(2 marks)

Continued...

c. A company whose home currency is the dollar (\$) expects to receive 600,000 pesos in six months' time from a customer in a foreign country. The following interest rates and exchange rates are available to the company:

Spot rate 16.00 peso per \$

Six-month forward rate 16.30 peso per \$

Borrowing interest rate 5% per year (Home country) 9% per year (Foreign country)

Deposit interest rate 4% per year (Home country) 7% per year (Foreign country) What is the six-month dollar value of the expected receipt using a money-market hedge?

(6 marks)

Question 4 (25 marks)

- A four year 6 per cent coupon bond with a par value of RM100 is selling to yield
 8 percent. The bond pays interest annually. One year later, interest rates decrease
 from 8 percent to 7 percent.
 - i) What is the price of the four year 6 percent coupon bond selling to yield 8 percent?

(5 marks)

ii) What is the price of this bond one year later, assuming the yield is unchanged at 8 percent?

(4 marks)

Continued ...

iii) What is the price of this bond one year later if the yield decreases to 7 percent?

(4 marks)

iv) Calculate the price change attributable to moving to maturity (if no change in discount rate) and the price change if an increase in the discount rate from 8% to 7%?

(4 marks)

b) What is meant by the intrinsic value of a bond?

(4 marks)

c) Discuss how the price of a bond is determined.

(4 marks)